

L4 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1
 AN 2002:225553 BIOSIS
 DN PREV200200225553
 TI Method for enrichment of unique DNA fragments through cyclical removal of
 PCR adapter attached to DNA fragments whose sequences are shared between
 two DNA pools.
 AU Luo, Jianhua (1)
 CS (1) 221 Buchanan Pl. #A3, Pittsburgh, PA, 15228 USA
 ASSIGNEE: Luo; Jianhua, Pittsburgh, PA, USA
 PI US 6316192 November 13, 2001
 SO Official Gazette of the United States Patent and Trademark Office Patents,
 (Nov. 13, 2001) Vol. 1252, No. 2, pp. No Pagination.
<http://www.uspto.gov/web/menu/patdata.html>. e-file.
 ISSN: 0098-1133.
 DT Patent
 LA English
 AB A method of rapid isolation and enrichment of the differences of DNA
 fragments between two pools of DNA. These methods feature a process of
 converting undesirable **tester** to **driver**, and then
 re-utilizing the converted "**driver**" in the **repeats** of
 subtraction to achieve double exponential **elimination** of
 undesirable **tester** sequence. Improvements include: i) bypassing
 the need of PCR amplification or physical separation of desirable
tester from undesirable one in each **repeat** of
 subtraction, it **eliminates** the necessity of **tester**
 dilution in each **repeat** of subtraction; ii) utilizing the
 converted "**driver**" from each **repeat** of subtraction, it
eliminates the need for re-introducing additional **driver**
 into hybridization in each repeat of subtraction. These methods typically
 include: a) attaching a specific PCR adapter to the 5' and 3' ends of a
 DNA fragment from one DNA pool to form "**tester**" (Step A); (b)
tester is mixed with **driver** that is not attached to
 adapter; (c) the mixture undergoes denaturing, re-annealing, and is
 followed by removal of adapter from **tester/driver**
 heteroduplex by single strand DNA specific nuclease; d) the process of (c)
 is then repeated at least once.